

FIG. 1

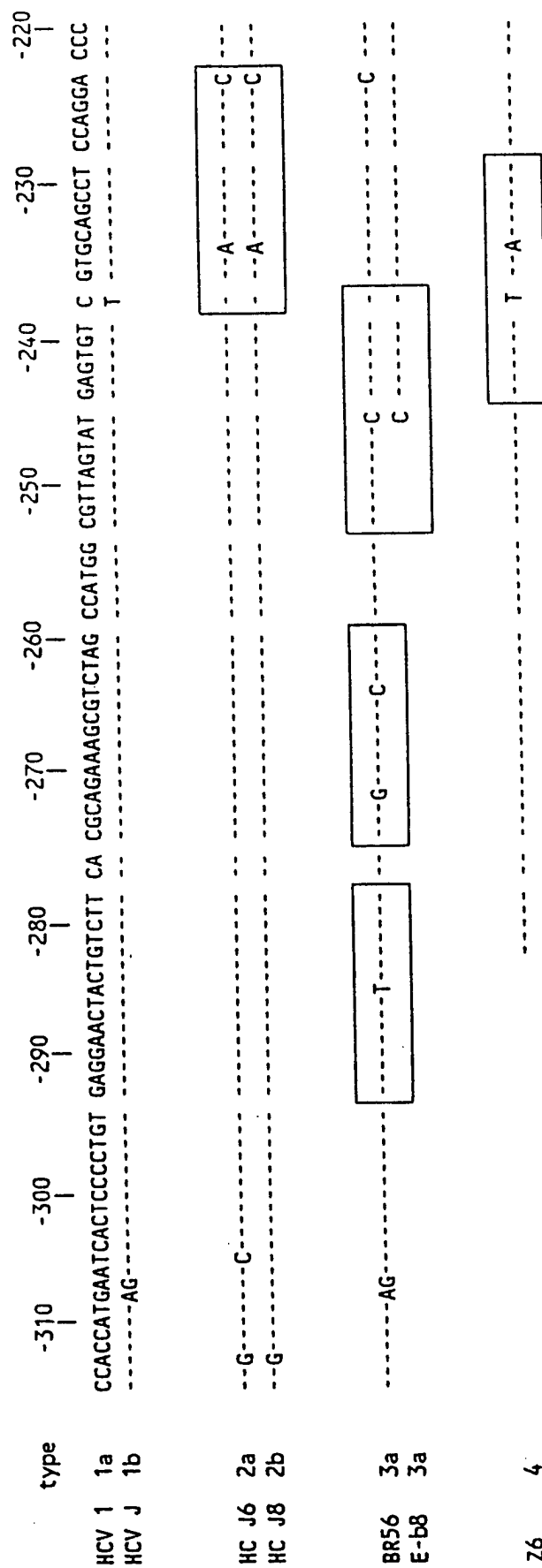


FIG. 2A

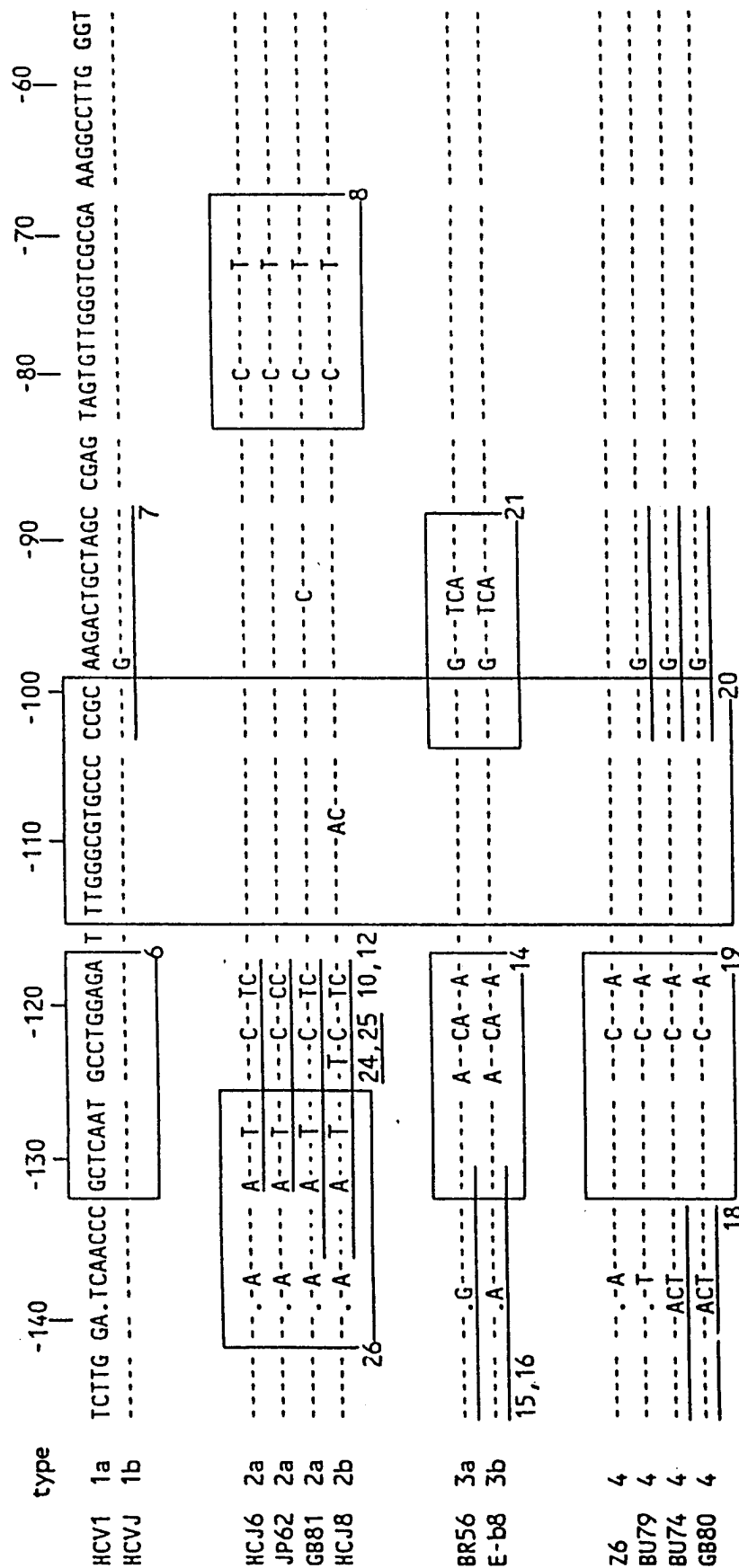


FIG. 2B

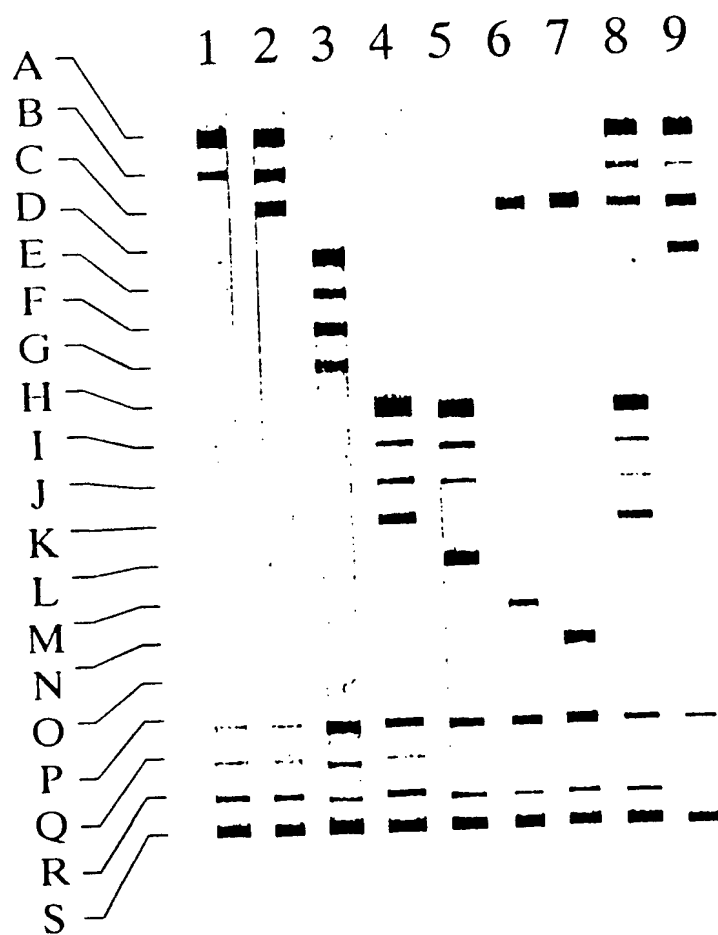


FIG. 3

| Iso- late | Type | Accession number ref. | | | | | | | | |
|--------------|------|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----|
| | | -240 ↓ | -230 ↓ | -220 ↓ | -180 ↓ | -170 ↓ | -160 ↓ | -150 ↓ | -140 ↓ | |
| HCV-1 | 1a | GAGTGTGTCGAGCCTCCAGGACCC*AGTACACCGGAATTGCCAGGACGACCGGGTCCTTTC..TTGGATC.AA | | | | | | | | 1 |
| HCV-J | 1b | -----T----- | | | | | | | | 2 |
| BE82 | 1b | -----* | | | | | | | | |
| BE90 | 1b | -----T----- | | | | | | | | 28 |
| HC-J6 | 2a | -----A----- | | | | | | | | 3 |
| HC-J8 | 2b | -----A----- | | | | | | | | 4 |
| BE91 | 2b | -----A----- | | | | | | | | |
| BE92 | 2c | -----A----- | | | | | | | | 32 |
| BR56 | 3a | -----C----- | | | | | | | | 33 |
| BE93 | 3a | -----C----- | | | | | | | | |
| BE94 | 3a | -----C----- | | | | | | | | |
| HCV-TR | 3b | -----C----- | | | | | | | | 5 |
| BE98 | 3c | -----C----- | | | | | | | | 6 |

SEQ ID NO 61
SEQ ID NO 62

SEQ ID NO 63

SEQ ID NO 64

SEQ ID NO 65
SEQ ID NO 66

SEQ ID NO 80

FIG. 4A-1

| Iso- late | Type | Accession number ref. | | | | | | | |
|--------------|------|-----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | | -240 ↓ | -230 ↓ | -220 ↓ | -180 ↓ | -170 ↓ | -160 ↓ | -150 ↓ | -140 ↓ |
| GB48 | 4a | --- | T-A- | --- | * | --- | C-G-T | --- | A- |
| GB116 | 4a | --- | T-A- | --- | * | --- | C-G-T | --- | T- |
| GB569 | 4a | --- | T-A- | --- | * | --- | C-G-T | --- | A- |
| GB358 | 4a | --- | T-A- | --- | * | --- | C-G-T | --- | A- |
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SEQ ID NO 67
SEQ ID NO 68
SEQ ID NO 69
SEQ ID NO 70

SEQ ID NO 72
SEQ ID NO 73
SEQ ID NO 74

SEQ ID NO 71

SEQ ID NO 81

SEQ ID NO 76

SEQ ID NO 77

SEQ ID NO 75

FIG. 4A-2

| Iso- late | Type | Accession number ref. | | | | | |
|--------------|------|-----------------------------|------|------|------|------|------|
| | | -240 | -230 | -220 | -180 | -170 | -160 |
| SA1 | 5a | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| BE95 | 5a | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| BE96 | 5a | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| HK1 | 6a | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| HK2 | 6? | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |

SEQ ID NO 78

SEQ ID NO 79

FIG. 4A-3

| Isolate | Type | -130 | -120 | -110 | -100 | -90 | -80 | -70 | Accession number reference |
|---------|------|--|------|------|------|-----|-----|-----|----------------------------------|
| | | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | |
| HCV-1 | 1a | CCCGCTCAATGCCTGGAGATTGGGCGTGCCCCCGCAAGACTGCTAGCCGAGTAGTGTGGGTCCGGA 31 | | | | | | | 1 |
| HCV-J | 1b | -----G----- | | | | | | | 2 |
| BE82 | 1b | -----G-----C----- | | | | | | | |
| BE90 | 1b | -----G-----G----- 30 | | | | | | | |
| HC-J6 | 2a | ---A---T---C---TC-----C-----T--- | | | | | | | 3 |
| HC-J8 | 2b | ---A---T---T---C---TC-----AC-----C-----T--- | | | | | | | 4 |
| BE91 | 2b | ---A---T---T---C---TC-----T-----C-----T--- | | | | | | | |
| BE92 | 2c | ---A---T-----TC-----34-----C-----T--- | | | | | | | |
| BR56 | 3a | -----A---CA---A-----G---TCA----- | | | | | | | 5 |
| BE93 | 3a | -----A---CA---C-----G---TCA----- | | | | | | | |
| BE94 | 3a | -----A---CA---C-----TCA----- 36 | | | | | | | |
| HCV-TR | 3b | -----C---A-----G---TCA----- | | | | | | | 6 |

FIG. 4B-1

| Isolate | Type | -130 ↓ | -120 ↓ | -110 ↓ | -100 ↓ | -90 ↓ | -80 ↓ | -70 ↓ | Accession number reference |
|---------|------|-----------|-----------|-----------|-----------|----------|----------|----------|----------------------------------|
| GB48 | 4a | --- | C--A-- | --- | --- | --- | --- | --- | |
| GB116 | 4a | --- | C--A-- | --- | --- | --- | --- | --- | |
| GB569 | 4a | --- | C--A-- | --- | --- | --- | --- | --- | |
| GB358 | 4a | --- | C--A-- | --- | --- | --- | --- | --- | |
| GB549 | 4e | --- | C--CA-- | --- | --- | --- | --- | --- | |
| | | | | 41 | | | | | |
| CAM600 | 4C | --- | TC--A-- | --- | --- | --- | --- | --- | |
| CAM736 | 4C | --- | TC--A-- | --- | --- | --- | --- | --- | |
| GB809 | 4C | --- | TC--A-- | --- | C | --- | --- | --- | |
| | | | | 43 | | | | | |
| GB487 | 4h | --- | --- | A-- | --- | --- | --- | --- | |
| | | | | 50 | | | | | |
| GB724 | 4g | --- | --- | A-- | --- | --- | --- | --- | |
| BE97 | 4g | --- | --- | A-- | --- | --- | --- | --- | |
| | | | | | | | | | |
| SA1 | 5a | --- | C-- | --- | G-- | --- | --- | --- | 7 |
| BE96 | 5a | --- | C-- | --- | G-- | --- | --- | --- | |
| BE95 | 5a | --- | C-- | --- | G-- | --- | --- | --- | |
| | | | | 46 | | | | | |
| HK1 | 6a | --- | --- | --- | --- | --- | --- | --- | 8 |
| BE98 | 3C | --- | C--A-- | --- | G-- | --- | --- | --- | |
| GB438 | 4f | --- | C--A-- | --- | G-- | --- | --- | --- | |

FIG. 4B-2

FIG. 5A

09899082 121201

| | | SEQ ID NO |
|-----------|---------------|-----------|
| | 101 | |
| HCV-1 | SAGVQEDAASLRA | |
| HC-J1 | ----- | |
| HCV-H | ----- | |
| HCV-J | ---T---A--- | |
| HCV-JK1 | ---T-----V | |
| HCV-CHINA | ---T-----V | |
| HCV-T | ---T-----V | |
| HC-J4.91 | ---T---A--- | |
| HCV-TA | ---T-----V | |
| HCV-JT | ---T-----V | |
| HCV-BK | ---T-----V | |
| BE90 | ---T-----V | 82 |
| HC-J6 | -Q-TE--ERN--- | |
| HC-J8 | -Q-NE--ERN--- | |
| BE91 | -Q-NE--ERN--- | 83 |
| BE92 | -Q-TE--ERN--- | 84 |
| T1 | -D--D--R-A--- | |
| T7 | -D--D--RTA--- | |
| BE93 | -D--D--R-A--- | 85 |
| T9 | -C--E--R-A--- | |
| T10 | -C--E--R-A--- | |
| GB48 | -D--E--KRP-G- | 86 |
| GB116 | -D--E--KRA-G- | 87 |
| GB215 | -D--E--KRA-GV | 88 |
| GB358 | -D--E--KRA-G- | 89 |
| GB549 | -G--E---RA--- | 90 |
| GB809 | -G--E--KRA-G- | 91 |
| BE95 | -Q-TH--E----- | 92 |
| CHR18 | -Q-TH--K----- | |

FIG. 5B

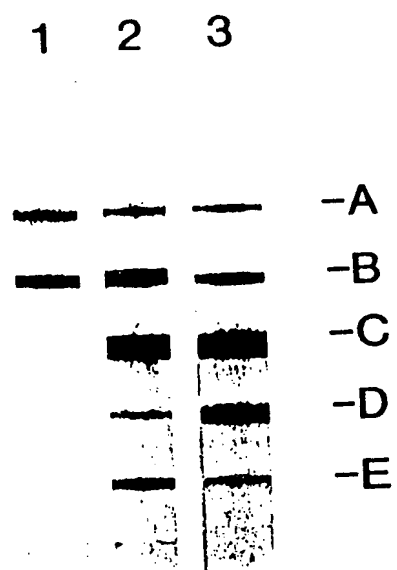


FIG. 6

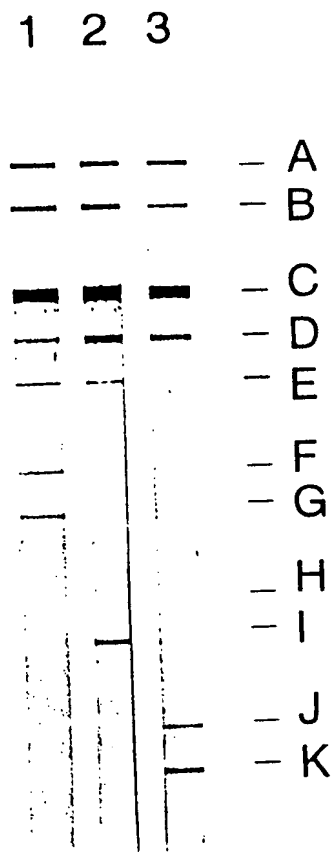


FIG. 7

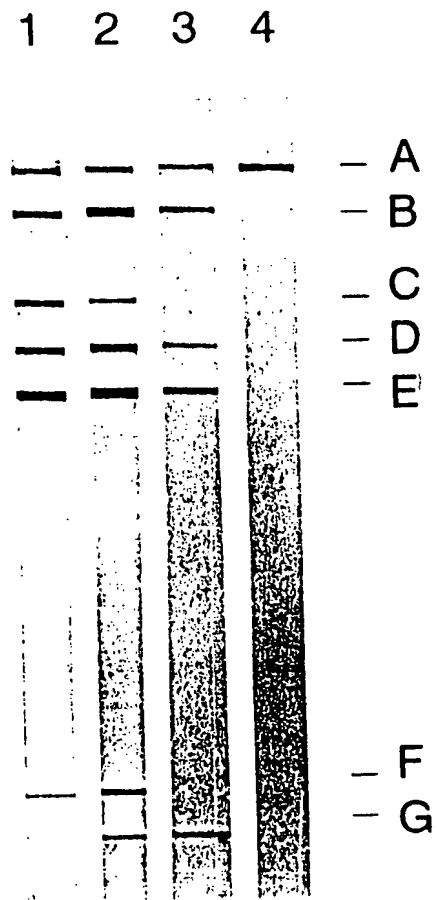


FIG. 8

09899082.121201

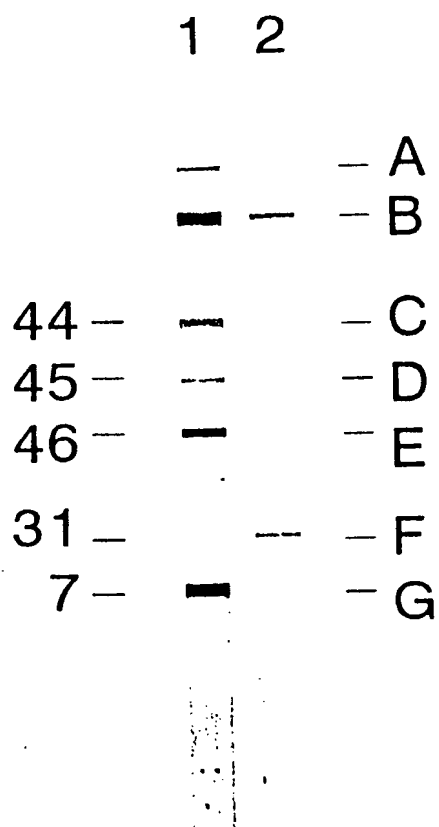


FIG. 9

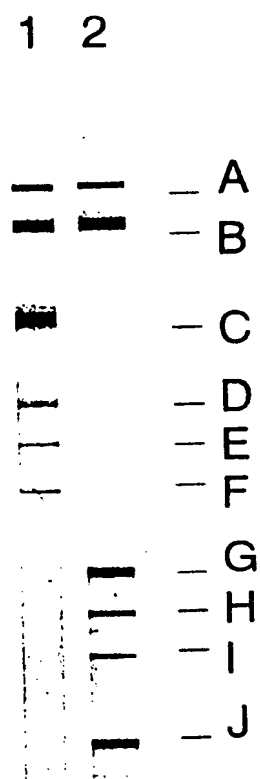


FIG. 10